

Aeronet Global Communications Inc., Corporation Trust Center, 209 Orange Street, Wilmington, New Castle, Delaware 19801 Registered in Delaware – 5440011

October 5, 2017

#### Via Electronic Filing

Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street SW Washington, DC 20554

Re: Ex Parte Presentation, Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, GN Docket No. 14-177; IB Docket No. 15-256; RM-11664; WT

Docket No. 10-112; IB Docket NO. 97-95.

Dear Ms. Dortch:

On October 4, 2017, Brian Russell and Ivor Fitzpatrick of Aeronet Global Communications Inc. and Roger Sherman (Waneta Strategies) met separately with Commissioner Michael O'Reilly and his Legal Advisor, Erin McGrath; Commissioner Brendan Carr and his Legal Advisor Kevin Holmes; Rachael Bender, Legal Advisor to Chairman Pai; Louis Peraertz, Senior Legal Advisor to Commissioner Clyburn; and Holly Saurer, Legal Advisor to Commissioner Rosenworcel, all regarding the above-referenced docket.

During the meetings, and consistent with the attached presentation, Aeronet described its innovative technology for delivering high-speed broadband connectivity to ships and planes, as well as its ongoing efforts to test its proposed systems. Aeronet emphasized the suitability of the E band (71-76 GHz, 81-86 GHz, 92-95 GHz) for this application and urged the adoption of final rules that would allow Aeronet to operate in the E band, subject to appropriate coordination.

Pursuant to the Commission's rules, a copy of this notice is being filed electronically in the above-referenced docket. If you require any additional information please contact the undersigned.

Sincerely,

/s/ Brian Russell

Brian Russell

Aeronet Global Communications Inc.

Attachment

cc: Erin McGrath

Kevin Holmes Rachael Bender Louis Peraertz Holly Saurer



# **OVERVIEW - AERONET**

04 Oct 2017

## Aeronet wants to provide high speed broadband to Aeronautical and Maritime



consumers want a connectivity experience 'like at home'

airline and cruises ship owners want operational efficiencies from real time IOT data

#### **BUT**

volume of passengers and IOT sources = huge bandwidth demand for a single small location



110-190 passengers 1:2.5 contention 450-750Mbps



300-800 passengers 1:5 contention 600-1,600Mbps



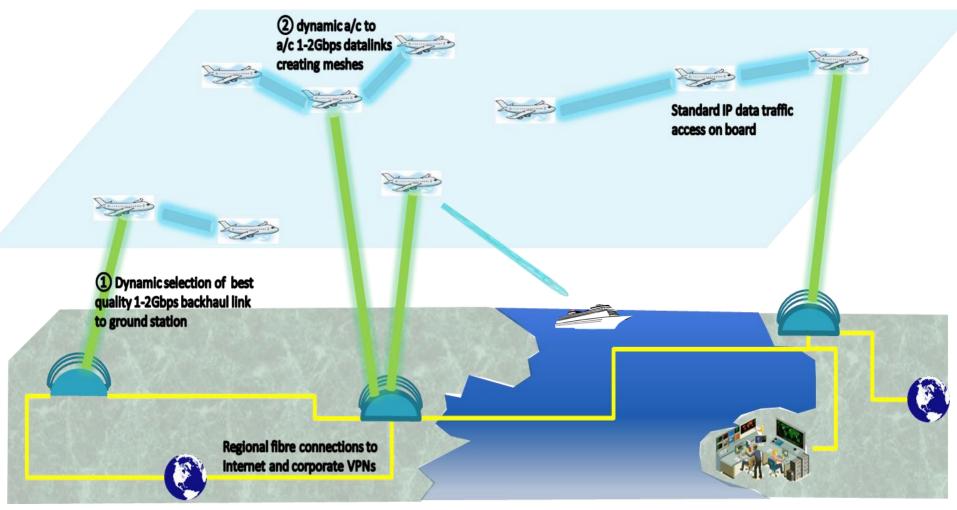
1900-4000 passengers 1:20 contention 950-2,000Mbps

### **Solution**

dedicated high capacity, low latency, line of sight datalinks provided on neutral wholesale basis

## Aeronet's innovative solution is Scheduled Dynamic Datalinks





- Scheduled the target vehicle for service follows a known and pre-planned route
- Dynamic while the vehicle moves, the end consumers are static onboard
- Datalinks point to point narrow radio beams akin to terrestrial fixed links

# Very large USA presence in underserved market



Maritime Market 12Mn cruise liner passenger capacity in North America across 109 ships in

2016, forecasted to growth 0.8Mn per annum.

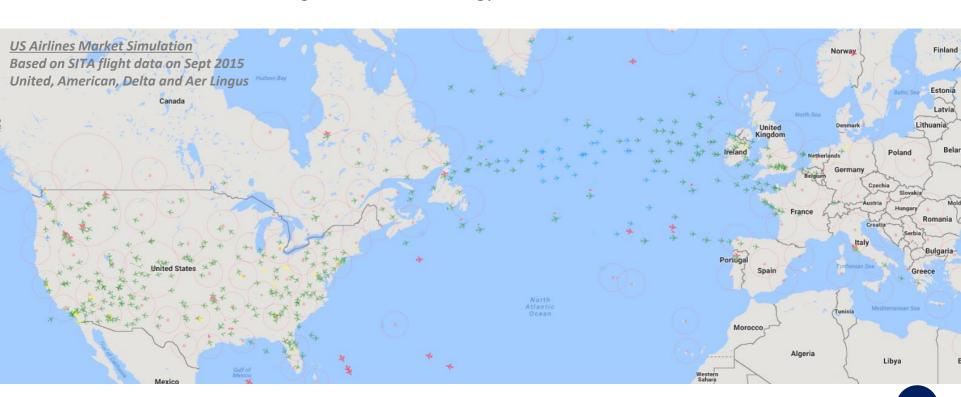
Aviation Market London School of Economics - Global connectivity based passenger ancillary

revenues of \$66bn in 2028.

Forecasted 13,200 connected Aircraft by 2025 in USA/Europe alone.

Other Knock on benefit for terrestrial long range Gbps fixed links from Aeronet

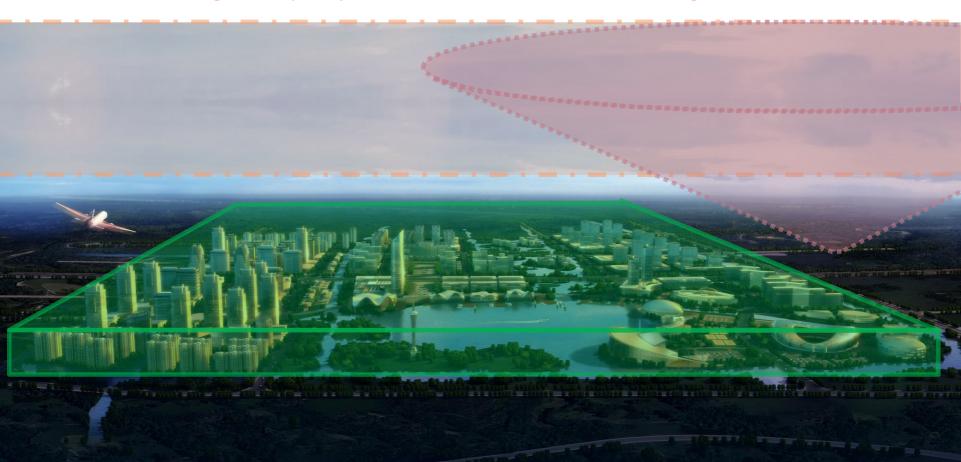
second generation technology.



# **Spectrum Frontiers: Aeronet's use means no interference to existing E band users**



- 1. separated 3D polygons for terrestrial fixed link users
- 2. angular separated 3D cones for ground aerial vehicle datalinks
- 3. nationwide assigned frequency channel licenses within set altitude ranges



# Characteristics of the E band support line of sight aerial system architectures



- narrow beam widths supporting angular separation mechanisms
- aviation use benefits from highly directional beams which ensures targeted bandwidth delivery
- propagation losses ensure very limited signal leakage
- ITU designation and FCC allocation for mobile service as a primary use
- light license regimes in place across a majority of the globe
- uncongested spectrum band, large enough to support high speed broadband services
- incumbent fixed link user volume is low, although will rise in dense population areas
- incumbent fixed link users spatial separated through their terrestrial usage
- significant volume of bandwidth allowing for frequency separation mechanisms